

REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the above amendment. The attached page is captioned **"Version with markings to show changes made."**

The amendment to claim 1 recites a subset of the photosensitizers indicated as enabled in the Office Action mailed December 18, 2001. Specifically, page 2 of the Action indicated that the photosensitizers disclosed on page 17, line 18, to page 35, line 15, of the specification are enabled. The amendment to claim 1 finds support at least on page 17, lines 19-21, page 18, lines 12-13, page 35, lines 6-9, and the claims as originally filed. As such, they are fully within the scope of the subject matter indicated as allowable. The amendment has been made for business reasons concerning commercially contemplated embodiments of the invention and not in acquiescence to any assertion against patentability as discussed below.

Claim 1 has also been amended to recite certain irradiation conditions. Support is found at least on page 14, lines 19-26, and Example 2 of the specification.

Claims 6 and 7 have been amended to correspond to amended claim 1.

No new matter has been added and entry of the amendment is respectfully requested.

The rejection under 35 U.S.C. 112, first paragraph

The Office has rejected claims 1-6 and 9-10 as purportedly not enabled.

As noted above, page 2 of the Office Action mailed December 18, 2001 indicated that the photosensitizers disclosed on page 17, line 18, to page 35, line 15, of the specification are enabled.

Because of business considerations and without acquiescence to the instant rejection, claim 1 has been amended without prejudice, and without listing 18 pages of photosensitizers as found on pages 17-35, to recite certain photosensitizers within those pages. Applicants point out that they have not surrendered claim scope with respect to the remaining photosensitizers listed on pages 17-35 or to the concept of “photosensitizer” in general. To the contrary, they reserve the right to pursue this subject matter, as well as the full scope of “photosensitizer” in a continuing application.

In light of the amendment to claim 1, Applicants respectfully submit that this rejection may be withdrawn.

The rejection under 35 U.S.C. 112, second paragraph

The Office has rejected claims 1-10 under 35 U.S.C. 112, second paragraph, as purportedly indefinite. Claim 1 has been amended to recite a specific range of energies used in combination with the recited photosensitizers. There is no indication that such energies would be inconsistent with the ability to practice the invention without depletion of all endothelial and smooth muscle cells.

Applicants respectfully submit that the instant rejection has been overcome and may be withdrawn.

The rejection under 35 U.S.C. 103(a)

The Office has again rejected claims 1-10 as allegedly unpatentable over Vincent et al. in view of Adili et al. While Applicants continue to believe that no *prima facie* case of obviousness has been presented in this combination of a reference that teaches the use of photosensitizers

without the use of photoactivation (Vincent et al.) and a second reference that teaches the use of photosensitizers with photoactivation (Adili et al.). Applicants also believe that, contrary to the Examiner's assertion, arguments traversing this rejection submitted February 19, 2002 have not been adequately addressed in the Advisory Action mailed April 19, 2002.

Without acquiescence to the instant rejection, claim 1 has been amended to recite a particular range of energies not found in either of the cited references. The claims thus contain a limitation not taught or suggested by the cited references, alone or in combination.

To the extent that the Examiner may still believe that "optimization of parameters" such as the total irradiation energy applied is "obvious", Applicants respectfully request that the Examiner consider what this would mean in the context of the two cited references. First, and with respect to Vincent et al., it would mean modifying teachings focussed on **not** using irradiation to use irradiation.

With respect to Adili et al., it would mean lowering the total energy applied below the amount of 50 J/cm^2 , which was observed to have little effect on reducing intimal hyperplasia (see later publication by Adili et al. as noted in the instant specification on page 5, lines 1-11).

Applicants thus respectfully submit that the instantly claimed invention cannot be obvious where the cited references have to be contorted in a manner that goes against their explicit teachings. An artisan of ordinary skill in the art would not find it obvious to twist the cited references in such a manner, and so the instant rejection should be withdrawn.

CONCLUSION

In light of the above amendments and remarks, Applicants believe that the claims are in condition for allowance and urge passage of the application to issue. The Examiner is invited to contact Applicants' agent at the number listed below if it would be helpful in any way to resolve any remaining issues.

In the event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 273012012200. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: June 17, 2002

Respectfully submitted,

By: 

Kawai Lau, Ph.D.
Registration No. 44,461

Morrison & Foerster LLP
3811 Valley Centre Drive - Suite 500
San Diego, CA 92130-2332
Telephone: (858) 720-5178
Facsimile: (858) 720-5125



Version with markings to show changes made.

Kindly amend the claims as follows:

1. (twice amended) A method to prevent, treat, inhibit, or reduce restenosis or intimal hyperplasia in adjunct with angioplasty in a human subject, which method comprises locally administering an effective amount of one or more photosensitizer selected from porfimer sodium, a green porphyrin, an angelicin, a chlorin, a coumarin, a pheophorbide, a pheophytin, a phthalocyanine, a porphycene, a psoralen, and a purpurin to a blood vessel site that has undergone angioplasty, and irradiating said site with radiation containing one or more wavelength(s) absorbed by said one or more photosensitizer for a time and at an intensity totaling from about 0.25 to about 25 J/cm² to prevent, treat, inhibit, or reduce restenosis or intimal hyperplasia at said site without depleting all endothelial and smooth muscle cells[; ~~wherein the concentration of said one or more photosensitizer, the intensity of the radiation, and the total energy provided are adjusted to provide said site with low dose photodynamic therapy].~~

6.(amended) The method of claim 1 wherein [~~the~~]said photosensitizer is [~~a porphyrin derivative~~]porfimer sodium.

7.(amended) The method of claim [6]1 wherein [~~the porphyrin derivative is porfimer sodium or~~] said photosensitizer is a green porphyrin.